DIRECT TESTIMONY OF

STEPHEN M. CUNNINGHAM

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2004-126-E

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Stephen M. Cunningham. My business address is 111 Research Drive, Columbia, SC, 29203.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by South Carolina Electric & Gas Company (SCE&G) and manage the development of new generation projects.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I received a Bachelor of Science degree in Electrical Engineering form Clemson University in 1972. I began my career with Duke Power Company that same year, performing design work on coal and nuclear generating plants. In 1974, I was employed by SCE&G to work on the design, construction and operation of the V. C. Summer Nuclear Station. During my fifteen-year affiliation with the nuclear project, I performed various engineering functions from design to management. In 1989, I transferred to the fossil and hydro generation group, where I managed the design engineering organization. From 1992 through 1996, I was Plant Manager at

SCE&G's Wateree Station. In 1996, I moved to the Power Block Services group where I currently manage and coordinate the development of new generation projects.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the arrangements we have made for providing fuel to operate SCE&G's Jasper County Generation Project. The siting of this project was previously reviewed and authorized in Docket No. 2001-420-E. In that proceeding, Neville Lorick, President of SCE&G, and I described our plans to contract with SCANA Energy Marketing, Inc. (SEMI) for 120,000 dekatherms(dt) of firm natural gas supply for this project. As further discussed in the Commission hearing in Docket 2004-2-E our final decisions are consistent with that initial planning.

Q. PLEASE DESCRIBE THE JASPER COUNTY GENERATION PROJECT AND ITS FUEL REQUIREMENTS.

A. The Jasper project is a combined cycle plant composed of three combustion turbine-generators, three heat recovery steam generators and one steam turbine-generator. The combustion turbines are equipped with inlet chilling to maximize the output of the plant during hot weather. The plant generates approximately 775 megawatts during the winter and 750 megawatts during the summer. The plant has the capability to generate additional "peaking" output of about 120 megawatts using supplementary firing. This is accomplished by burning additional fuel in the steam generators producing more steam and more output from the steam turbine-generator. The peak output from the plant is approximately 900 megawatts during the winter and 875 megawatts during the summer.

Natural gas is the primary fuel for the combustion turbines with No. 2 fuel oil available as a back-up. The supplementary firing burners can only burn natural gas. Operating the

combustion turbines at full output for 24 hours requires approximately 130,000 dekatherms of natural gas. Operating the supplementary firing burners at full output adds about 1200 dekatherms per hour or about 29,000 dekatherms for 24 hours of operation. The primary reason for the back-up fuel capability is to assure the plant can operate to meet peak electrical demands in the event gas service is curtailed or interrupted.

Q. PLEASE DESCRIBE YOUR FUEL PROCUREMENT REQUIREMENTS AND YOUR PLAN FOR MEETING THEM.

A. To meet its natural gas requirements, SCE&G has entered into an agreement with SEMI, a copy of which is provided under seal as Exhibit No. ___ (SMC-1). The reason the agreement has been provided under seal is that its contents are of a very sensitive, commercially competitive nature for SCE&G, SEMI, and upstream providers and, therefore, are considered proprietary. It is recognized, however, that the Commission must have the document available for review in order to determine the reasonableness and prudence of the contractual arrangement, and, thus, it is being provided under seal for your review. In the open record, I can tell you that the agreement provides for up to 120,000 dekatherms/day of firm supply. The balance of our requirements will be purchased on an interruptible basis. SEMI has contracted with SCG Pipeline, Inc., a recently formed interstate pipeline and SCANA subsidiary, to transport gas to the generation project from the Elba Island Liquefied Natural Gas (LNG) facility located near Savannah and from Southern Natural pipeline's Savannah lateral. SEMI has also entered into contracts with upstream providers for the supply and transportation of natural gas with delivery to SGC Pipeline, Inc. Exhibit No. ___ (SMC-2) is a diagram showing the location of the Jasper project and the arrangement of these pipelines. I would emphasize that using these diverse sources of supply and transportation, SEMI has been able to structure an arrangement that will

provide SCE&G with gas supply and transportation at favorable rates and terms that will benefit our electric customers. Also, with the ability to receive gas from two points of origin, we have substantially reduced the implications of service interruptions. We believe, and represent to the Commission, that the contractual arrangement with SEMI provides a very reliable and flexible supply of gas with pricing that is competitive with alternatives in the area. We, therefore, respectfully request that the Commission find this contractual arrangement to be prudent.

Q. PLEASE EXPLAIN WHY THIS AGREEMENT BETWEEN SCE&G AND SEMI IS THE BEST ALTERNATIVE FOR THE JASPER PROJECT.

A. Exhibit No. ___ (SMC-3), also provided under seal, presents a comparison of the gas supply costs for the different available alternatives. This table compares the Jasper contract costs with the costs at the existing Urquhart combined cycle units, the costs for a plant served directly from Southern Natural Pipeline Company (Southern Natural), the costs for a plant located at Jasper served by Southern Natural and SCG pipelines without the benefits of the contract with SEMI, and the costs for a plant in the Piedmont section of South Carolina served by Transco Pipeline. The costs provided for each of these alternatives are enumerated in the applicable contracts or in the FERC approved tariffs for interstate pipelines and are as follows:

- The monthly demand or reservation charge in dollars per dekatherm per day provides guaranteed delivery of up to the contracted quantity of gas each day, 120,000 dekatherms per day in the case of Jasper.
- The variable charge in dollars per dekatherm is charged only for gas actually delivered.
- The fuel charge is a percentage of the gas we purchase but don't receive. This is fuel that is used by the pipelines to operate compression or that is lost through leakage.

The table also provides, for illustration, the total delivered cost of gas based on an assumed cost of gas at the Henry Hub of $5.00 per dekatherm. (Henry Hub is the market reference for natural gas commodity pricing in the US.) The variable charges are a combination of the variable and fuel charges. The 100% load factor demand charge is the demand charge stated on a daily basis per dekatherm. The sum of these provides the total cost of gas delivered and allows comparison of the different alternatives. As can be seen, each of the rate components as well as the total cost is lowest for the Jasper alternative with the exception of the monthly demand charge for Transco. The relatively high variable and fuel charges on Transco more than offset the lower demand charge. Any plant served by the Transco pipeline in South Carolina would likely be connected to the Duke Power transmission system and would entail a transmission charge for energy delivered to the SCE&G system.

In addition to providing lower fixed and variable costs than our alternatives, this agreement provides other benefits. First, we get the benefit of these lower costs without any obligation to take and pay for any quantity of gas eliminating volumetric risk. We have complete flexibility in scheduling gas to support the economic dispatch of this combined cycle plant.

Second, the fixed and variable transportation costs as well as the gas commodity costs are indexed to the FERC approved interstate pipeline tariffs and to Henry Hub pricing respectively. This assures the cost of gas supply will remain competitive over the fifteen year term of the agreement eliminating price risk.

Third, while gas will normally be delivered from the Elba LNG terminal it can also be delivered over interstate pipelines from the Gulf of Mexico. If supply from either of these sources is curtailed, the agreement provides for firm delivery of at least half of the supply from the unaffected source. If, for example, a hurricane interrupted supply of gas from one of the

sources the plant could continue to operate with supply from the other source. This diversity of supply is very important for a major generation facility like Jasper.

Q. COULD SCE&G STRUCTURE A SIMILAR FUEL SUPPLY ARRANGEMENT FOR THE JASPER PLANT WITHOUT THE INVOLVEMENT OF A MARKETING ENTITY LIKE SEMI?

A. Elba Island presented an excellent opportunity for a buyer that was willing and able to take the daily risk of placing very large quantities of gas. SCE&G needs a firm and reliable supply of gas on the days that the generating facilities need the gas. But on the days that these facilities are not required to operate, SCE&G is not in a position to take the risk of finding customers for large volumes of gas. For this reason only an entity with significant customer demand in the vicinity can take this volumetric risk and structure such a contract. Rose Jackson will discuss these risks from the perspective of a marketing entity. Without the involvement of a marketing entity like SEMI, SCE&G's next best alternative would have been to contract directly with interstate pipelines like Southern Natural and SCG for long haul transportation of gas from the Gulf of Mexico. As illustrated in Exhibit No. ___ (SMC-3) this is a more costly alternative.

Q. HOW DID SCE&G DECIDE TO CONTRACT WITH SCANA ENERGY MARKETING INSTEAD OF ANOTHER MARKETER?

A. While SCE&G was evaluating sites for this project, Southern Natural Gas Company's marketing affiliate, El Paso Merchant Energy (EPME), approached SCANA about purchasing a large quantity of gas from Elba. EPME needed "anchor" buyers for large quantities of re-gasified LNG at Elba and was willing to agree to favorable contract terms in order to secure long-term sales. Elba Island presented an excellent opportunity for a buyer that was willing and able to take the daily risk of placing very large quantities of gas. SEMI, with its large customer

base in the Georgia retail gas market, was in a unique position to take advantage of this opportunity. Based on their discussions with EPME, SEMI proposed fuel supply arrangements and costs for a plant sited in the lower part of South Carolina near Savannah. This formed the basis for our evaluation of the Jasper site and its subsequent selection.

SEMI was the only entity we were aware of that could handle the daily placement risk of sufficiently large quantities that would allow for competitive gas prices. When the proposed Jasper facility was first announced publicly no other party approached us with an interest in supplying gas to the project. SEMI was also the only entity that requested capacity on the proposed SCG Pipeline after SCG's open season solicitation. Since SCE&G's analysis showed that the Jasper site with its favorable gas supply costs was our best alternative and with SEMI as the only known entity in a position to provide these gas arrangements, we proceeded to negotiate with them. SCE&G fully realized that any gas supply contract with an affiliate would be reviewed by this Commission and, to be deemed prudent, would have to result in lower costs than any other alternative. We have achieved that objective as shown above. In fact, had it not been for SCE&G's affiliate SEMI, these lower gas supply costs would not have been achieved for our electric customers.

Q. PLEASE PROVIDE AN OVERVIEW OF THE PROCESS SCE&G AND SEMI FOLLOWED TO ARRIVE AT THIS AGREEMENT.

A. During the summer of 1999, when Southern Natural LNG announced plans to reactivate the Elba Island LNG facility, SCANA saw an opportunity to enhance and diversify its gas supply. With Elba Island's close proximity to South Carolina, SCANA envisioned construction of a relatively short pipeline that would connect this important new source of natural gas to South Carolina. The benefits would be many. It would add a third, cost-competitive source of

natural gas to support our customer base. It would improve fuel delivery to the lower part of the state. For SCE&G and its customers, it presented the opportunity to improve reliability through the location of a much-needed generating plant, and placed it in the lower part of the state with access to very favorable fuel transportation arrangements.

The process followed by SCE&G and SEMI to come to this agreement was unique, complex and challenging. It required coordinating independent, parallel opportunities for the benefit of electric and gas customers, as well as shareholders. Exhibit No. ____ (SMC - 4), also provided under seal, is a timeline that shows the evolution of the process that brought about the successful culmination of our efforts. We had to negotiate numerous contracts and agreements, find routes for pipelines and transmission lines, select a power plant site, obtain many regulatory approvals and permits, and manage construction projects, schedules and budgets - independently, yet simultaneously.

The success of these efforts is a direct result of the hard work of many parts of the company, both regulated and non-regulated, and the commitment of pursuing opportunities that benefit our customers and shareholders.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes.

Exhibit No. ___ (SMC-1)

GAS SUPPLY AGREEMENT

between

SOUTH CAROLINA ELECTRIC & GAS COMPANY, as Buyer

and

SCANA ENERGY MARKETING, INC., as Seller

dated as of

April 2, 2004

(Submitted under Seal)

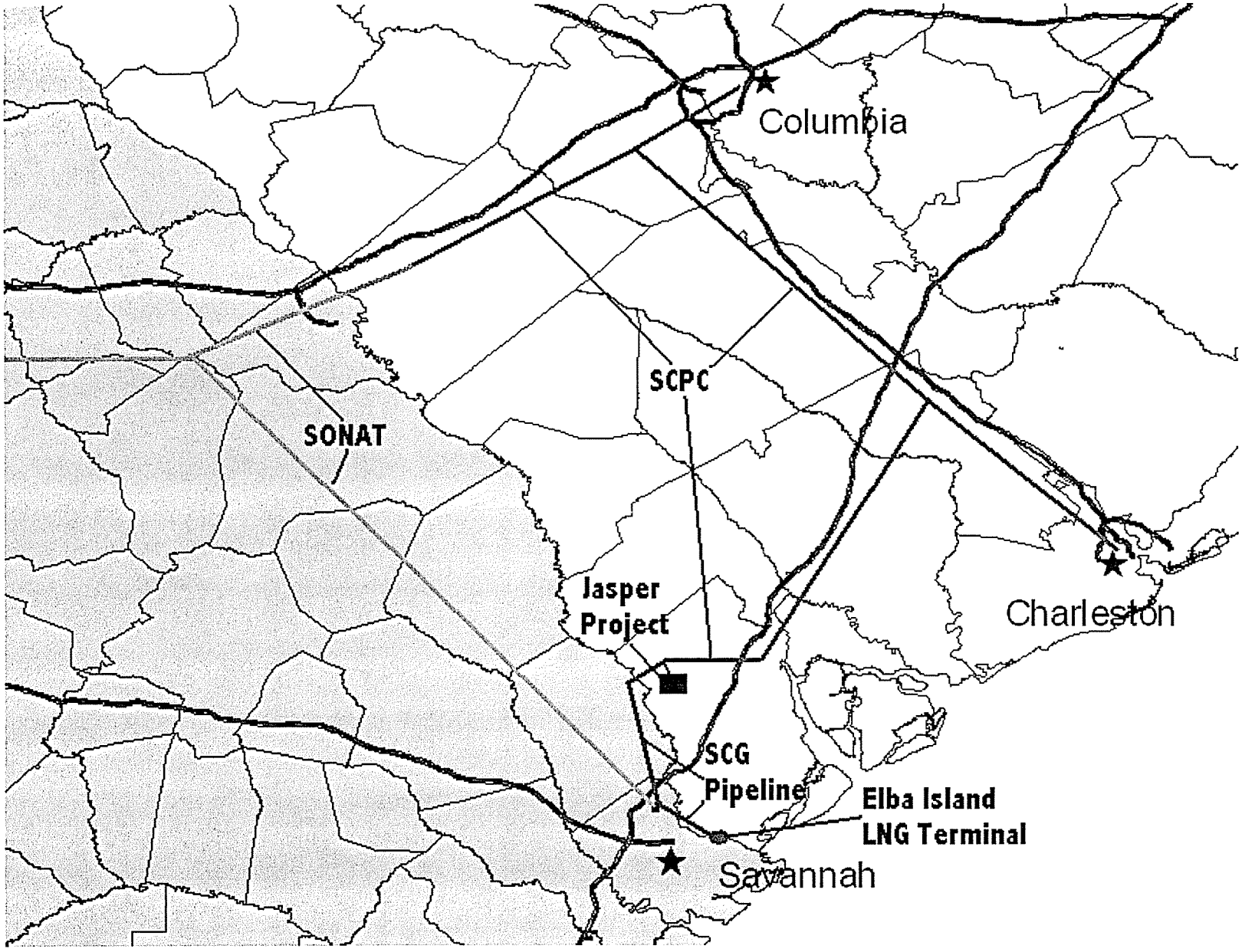
Columbia
SCPC
SONAT
Jasper
Project
Charleston
SCG
Pipeline
Elba Island
LNG Terminal
Savannah

Exhibit No. ____ (SMC-3)

COMPARISON OF

GAS SUPPLY ALTERNATIVES

(Submitted under Seal)

Exhibit No. ____ (SMC-4)

TIMELINE FOR

JASPER GAS CONTRACTS

(Submitted under Seal)